

Vascular alien flora, Chile

Eduardo Ugarte*, Francisco Lira, Nicol Fuentes and Stefan Klotz

Universidad de Concepción. Departamento de Botánica. Laboratorio de Ecología Vegetal. Casilla 160-C, Concepción, Chile

ABSTRACT: We compiled a list of 737 alien plant species growing in continental Chile. Most names were obtained from herbarium specimens (mainly herbarium CONC at Universidad de Concepción, Chile). More than fifty percent of the species are european in origin. Besides, records also include: traits related to life-cycle and brief coments on origin and history of introduction.

INTRODUCTION

One of the most striking consequences of globalization is the increase in the problem of alien introduced species. At local and regional extents there is evidence that species richness has increased for many taxonomic groups through the addition of new species (Sax and Gaines 2003). Naturalized and dispersed species add significantly to a country's total biodiversity as well (Pyšek 1998a; Richardson et al. 2000; Kühn et al. 2004a).

European colonization in SouthAmerica has been associated to serious landscape modifications after a first (and more important) wave of introductions of European plants in Chile (Mathei 1995, Arroyo et al. 2000). A second, more recent wave of arrivals derive from new agricultural techniques and to forestry during the late 20th century (Fuentes *et al.* 2007).

We present here an updated list of the alien plant species reported until now for Chile.

MATERIALS AND METHODS

Information was gathered mainly from herbaria specimens (mainly CONC and SGO). Main bibliographical sources were Marticorena and Quezada (1985) and Mathei (1995). Records include, besides name and origin, information on life cycle and growth-form after nomenclature in Biolflor database (Kühn et al. 2004b; see http://www.biolflor.de for further information). The floristic survey included naturalized alien species (establishing sustainable populations, Richardson et al. 2000) as well as casuals (no self-replacing populations, relying on repeated human induced introduction, Richardson et al., 2000) being frequently introduced (repeated introductions every year). We also incorporated species whose origin is labelled just as "South American" even though it is impossible to be certain if they were introduced before the arrival of Spanish conquerors. This

database was implemented within the framework of ALARM project (Settele et al. 2005).

RESULTS AND DISCUSSION

In Table 1 we list the 737 alien plant species already recorded for Chile. 156 of them are reported as widely distributed in South America. It is in fact impossible to establish if those species labeled as "South American" arrived into Chilean territory carried *via* human migrations before spanish colonization. The same is valid for the 40 species whose origin is reported as "American" (Table 2). More than a half of the total are european and the best represented genera are Bromus (Poaceae) and Trifolium (Fabaceae), each one with 15 species. Close to 85% have been reported as weeds at least once, involving a broad range of impacts in agriculture or the environment.

As shown in Table 3, more than 50% of the species belong to the families Poaceae, Asteraceae, Fabaceae, and Brassicaceae. These families have been recognized as the most common within alien floras of the world (Pyšek 1998b). Also, annual and perennial were the most frequent life-cycles (332 and 324 species respectively, Table 4), while herbs (672 species), and shrubs (41 species), were the best represented life-forms (Table 5).

The alien flora represents roughly 14% of the total Chilean flora (Arroyo et al. 2000). First inventories date from the nineteenth century, 400 years after the arrival of spanish conquerors. Agricultural practices and associated dramatic landscape changes prompted dispersión and naturalization; in fact, at present most of the species are agricultural weeds. Many of them build large populations taking advantage of man-made habitats such as roadborders, railroads and cities. (Fuentes et al. 2004; Lira et al. 2008).

^{*} Corresponding author. Email: edugar@udec.cl

TABLE 1. List of alien flora in Chile.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Abutilon grandiflorum G. Don	Malvaceae	Africa-Eurasia	1996
Acacia aroma Gillies ex Hook.	Mimosaceae	South America	1955
Acacia dealbata Link	Mimosaceae	Australia	1881
Acacia horrida Willd	Mimosaceae	Africa	1950
Acacia macracantha Willd	Mimosaceae	South America	1955
Acacia melanoxylon R.Br.	Mimosaceae	Australia	1923
Acacia visco Lorentz.	Mimosaceae	South America	1956
Acaena argentea Ruiz and Pav.	Rosaceae	South America	1847
Acaena pinnatifida Ruiz et Pav.	Rosaceae	South America	1847
Achillea millefolium L.	Asteraceae	Europe	1875
Acmella glaberrima (Hassl.) R.K.Jansen	Asteraceae	South America	1985
Adiantum capillus-veneris L	Adiantaceae	Europe	1861
Ageratum conyzoides L.	Asteraceae	Central America	1921
Agropyron cristatum (L.) Gaertner	Poaceae	Eurasia	1988
Agrostemma githago L.	Caryophyllaceae	Europe	1881
Agrostis capillaris L.	Poaceae	Eurasia	1914
Agrostis castellana Boiss. and Reuter.	Poaceae	Europe	1924
Agrostis gigantea Roth	Poaceae	Eurasia	1930
Agrostis scabra Willd.	Poaceae	North America	1919
Agrostis stolonifera L.	Poaceae	Europe	1937
Ailanthus altissima (Mill.) Swingle	Simaroubaceae	East of Asia	1913
Aira caryophyllea L.	Poaceae	Europe	1854
Aira elegantissima Schur.	Poaceae	Europe	1939
Aira praecox L.	Poaceae	Europe	1884
Alisma lanceolatum With.	Alismataceae	Europe	1928
Alisma plantago-aquatica L.	Alismataceae	Europe	1920
Allium vineale L.	Liliaceae	Europe	1968
Alnus glutinosa (L.) Gaertn.	Betulaceae	Europe	1930
Alopecurus geniculatus L.	Poaceae	Eurasia	1951
Alopecurus pratensis L.	Poaceae	Eurasia	1958
Alyssum alyssoides (L.) L.	Brassicaceae	Europe	1984
Amaranthus albus L.	Amaranthaceae	North America	1887
Amaranthus cruentus L.	Amaranthaceae	South America	1942
Amaranthus deflexus L.	Amaranthaceae	South America	1849
Amaranthus emarginatus Moq. ex Uline and Bray	Amaranthaceae	Central America	1991
Amaranthus hybridus L.	Amaranthaceae	North America	1849
Amaranthus retroflexus L.	Amaranthaceae	North America	1849
Amaranthus viridis L.	Amaranthaceae	Cosmopolite	1849
Ambrosia arborescens Miller.	Asteraceae	South America	1987
Ambrosia artemisiifolia L.	Asteraceae	Central America	1959
Ambrosia peruviana Willd.	Asteraceae	South America	1950
Ambrosia tenuifolia Spreng.	Asteraceae	America	1923
Ammannia coccinea Rottb.	Lythraceae	South America	1983
Ammannia latifolia L.	Lythraceae	America	1991
Ammi majus L	Apiaceae	Europe	1976
Ammi visnaga L.	Apiaceae	Europe	1848

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Anagallis arvensis L.	Primulaceae	Europe	1849
Anemone decapetala Ard,	Ranunculaceae	South America	1845
Anemone multifida Poir.	Ranunculaceae	America	1845
Anoda cristata (L.) Schltdl.	Malvaceae	America	1846
Anthemis arvensis L.	Asteraceae	Europe	1904
Anthemis cotula L.	Asteraceae	Europe	1848
Anthoxanthum odoratum L.	Poaceae	Europe	1875
Anthriscus caucalis Bieb.	Apiaceae	Europe	1899
Anthriscus sylvestris (L.) Hoffm.	Apiaceae	Eurasia	1973
Apera interrupta (L.) Beauv.	Poaceae	Europe	1947
Aphanes arvensis L.	Rosaceae	Europe	1847
Apium graveolens L.	Apiaceae	Europe	1929
Apium nodiflorum (L.) Lag.	Apiaceae	Europe	1899
Aquilegia vulgaris L.	Ranunculaceae	Europe	1931
Arctium minus Bernh.	Asteraceae	Europe	1929
Arctotheca calendula (L.) Levyns.	Asteraceae	Africa	1940
Arrhenaterum elatius (L.) J.andC.Presl.	Poaceae	Europe	1921
Artemisia absinthium L.	Asteraceae	Europe	1848
Arundo donax L.	Poaceae	Asia	1948
Asclepias curassavica L.	Asclepiadeaceae	America	1930
Asperugo procumbens L.	Boraginaceae	Europe	1988
Asphodelus fistulosus L.	Liliaceae	Europe	1987
Aster squamatus (Spreng) Hier.	Asteraceae	South America	1848
Atriplex hortensis L.	Chenopodiaceae	Europe	1884
Atriplex nummularia Lindl.	Chenopodiaceae	Australia	1982
Atriplex patula L.	Chenopodiaceae	Europe	1967
Atriplex prostrata Bouch. ex DC.	Chenopodiaceae	Europe	1881
Atriplex rosea L.	Chenopodiaceae	Australia	1983
Atriplex semibaccata R. Br.	Chenopodiaceae	Australia	1927
Atriplex suberecta Verd.	Chenopodiaceae	Africa	1982
Atriplex tatarica L.	Chenopodiaceae	Eurasia	1954
Avena barbata Pott ex Link	Poaceae	Europe	1854
Avena fatua L.	Poaceae	Europe	1937
Avena sativa L.	Poaceae	Europe	1932
Avena sterilis L.	Poaceae	Europe	1958
Avena strigosa Schreb.	Poaceae	Europe	1927
Azolla filiculoides Lam.	Azollaceae	America	1854
Baccharis pingraea DC	Asteraceae	South America	1848
Barbarea verna (Mill.) Aschers.	Brassicaceae	Europe	1928
Bartsia trixago L.	Scrophulariaceae	Europe	1949
Bassia hyssopifolia (Pall.) Kuntze	Chenopodiaceae	Europe	1954
Bellis perennis L.	Asteraceae	Europe	1881
Beta vulgaris L.	Chenopodiaceae	Europe	1849
Bidens aurea (Aiton)Sherff.	Asteraceae	North America	1941
Bidens laevis L.	Asteraceae	North America	1848
Bidens pilosa L.	Asteraceae	Central America	1848
Bidens pseudocosmos Sherff.	Asteraceae	South America	1978

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Bidens subalternans DC	Asteraceae	South America	1978
Boerhavia diffusa L.	Nyctaginaceae	Central America	1891
Borago officinalis L.	Boraginaceae	Europe	1849
Bothriochloa laguroides (DC.) Herter.	Poaceae	America	1923
Bothriochloa saccharoides (Sw.) Rydb	Poaceae	America	1930
Brachypodium distachyon (L.) Beauv.	Poaceae	Europe	1975
Brassica napus L.	Brassicaceae	Europe	1846
Brassica nigra (L.) Koch.	Brassicaceae	Europe	1846
Brassica oleracea L.	Brassicaceae	Europe	1931
Brassica rapa L.	Brassicaceae	Europe	1846
Briza maxima L.	Poaceae	Europe	1881
Briza minor L.	Poaceae	Europe	1875
Bromidium anomalum (Trin.) Doell.	Poaceae	South America	1846
Bromus berterianus Colla.	Poaceae	South America	1854
Bromus catharticus Vahl.	Poaceae	South America	1854
Bromus diandrus Roth.	Poaceae	Europe	1919
Bromus erectus Huds.	Poaceae	Europa-Africa	1927
Bromus hordeaceus L.	Poaceae	Europe	1922
Bromus lanceolatus Roth.	Poaceae	Europe	1830
Bromus madritensis L.	Poaceae	Europe	1875
Bromus racemosus L.	Poaceae	Europe	1947
Bromus rigidus Roth.	Poaceae	Europe	1923
Bromus scoparius L.	Poaceae	Europe	1875
Bromus secalinus L.	Poaceae	Europe	1904
Bromus squarrosus L.	Poaceae	Europe	1986
Bromus stamineus Desv.	Poaceae	South America	1854
Bromus sterilis L	Poaceae	Europe	1924
Bromus tectorum L.	Poaceae	Europe	1848
Caesalpinia gilliesii (Hook.) Bentham.	Fabaceae	South America	1950
Calceolaria tripartita Ruiz and Pav.	Scrophulariaceae	Central America	1917
Calendula arvensis L.	Asteraceae	Europe	1910
Calendula officinalis L.	Asteraceae	Europe	1848
Calendula tripterocarpa Rupr.	Asteraceae	Europe	1960
Callitriche terrestris Raf.	Callitrichaceae	America	1887
Calyptocarpus vialis Less.	Asteraceae	Central America	1991
Calystegia sepium (L.) R.Br	Convolvulaceae	Cosmopolite	1849
Camellina alissum (Miller) Thell.	Brassicaceae	Europe	2001
Capsella bursa-pastoris (L.)Medik.	Brassicaceae	Europe	1846
Cardamine hirsuta L.	Brassicaceae	Europe	1846
Cardaria draba (L.) Desv.	Brassicaceae	Europe	1937
Carduus nutans L.	Asteraceae	Europe	1960
Carduus pycnocephalus L.	Asteraceae	Europe	1928
Carduus thoermeri Weinm.	Asteraceae	Eurasia	2000
Carex brongniartii Kunth	Cyperaceae	South America	1854
Carex pseudocyperus L.	Cyperaceae	South America	1854
Carthamus lanatus L.	Asteraceae	Europe	1919
Carthamus tinctorius L.	Asteraceae	Mediterranean basin	1936

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Catabrosa aquatica (L.) P. Beauv.	Poaceae	Circumpolar	1980
Catapodium rigidum (L.) C.E. Hubb.	Poaceae	Europe	1925
Cenchrus echinatus L.	Poaceae	Central America	1917
Cenchrus incertus Curtis.	Poaceae	Central America	1939
Cenchrus myosuroides Kunth.	Poaceae	Central America	1925
Centaurea calcitrapa L.	Asteraceae	Europe	1925
Centaurea jacea L.	Asteraceae	Europe	1884
Centaurea melitensis L.	Asteraceae	Europe	1848
Centaurea nigra L.	Asteraceae	Europe	1984
Centaurea solstitialis L.	Asteraceae	Europe	1956
Centaurium littorale (Turner ex Sm.) Gilmour.	Gentianaceae	Europe	1986
Centaurium pulchellum (Swartz) Druce	Asteraceae	Europe	1898
Cerastium arvense L.	Caryophyllaceae	Europe	1846
Cerastium fontanum Baumg.	Caryophyllaceae	Europe	1854
Cerastium glomeratum Thuill.	Caryophyllaceae	Europe	1846
Cestrum parqui L'Hér.	Solanaceae	South America	1849
Chaetotropis chilensis Kunth.	Poaceae	South America	1854
Chamaemelum mixtum (L.)All.	Asteraceae	Europe	1920
Chamomilla recutita (L.) Raus.	Asteraceae	Europe	1881
Chamomilla suaveolens (Pursh) Rydb.	Asteraceae	North America	1903
Chenopodium album L.	Chenopodiaceae	Europe	1849
Chenopodium ambrosioides L.	Chenopodiaceae	America	1849
Chenopodium antarcticum (Hook. f.) Benth. et Hook.	Chenopodiaceae	South America	1849
Chenopodium carnosulum Moq.	Chenopodiaceae	America	1895
Chenopodium ficifolium Sm.	Chenopodiaceae	Europe	1849
Chenopodium glaucum L.	Chenopodiaceae	Eurasia	1974
Chenopodium hircinum Schrad.	Chenopodiaceae	South America	1849
Chenopodium multifidum L.	Chenopodiaceae	South America	1895
Chenopodium murale L	Chenopodiaceae	Asia Minor	1849
Chenopodium vulvaria L.	Chenopodiaceae	Eurasia	1925
Chiliotrichum diffusum (Forst.f.) Kuntze	Asteraceae	South America	1848
Chiliotrichum rosmarinifolium Less	Asteraceae	South America	1848
Chloris gayana Kunth.	Poaceae	Africa	1951
Chloris radiata (L.) Sw.	Poaceae	Central America	1930
Chloris virgata Sw.	Poaceae	Central America	1955
Chrysanthemoides moniliferum (L.) T.Nord.	Asteraceae	Africa	1932
Chrysanthemum coronarium L.	Asteraceae	Europe	1881
Chrysanthemum segetum L	Asteraceae	Europe	1904
Cichorium intybus L.	Asteraceae	Europe	1848
Cirsium arvense (L.) Scop.	Asteraceae	Europe	1937
Cirsium vulgare (Savi) Ten	Asteraceae	Europe	1875
Clematis bonariensis Juss. ex DC.	Ranunculaceae	South America	1966
Clematis montevidensis Spreng.	Ranunculaceae	South America	1956
Cnicus benedictus L.	Asteraceae	Europe	1848
Coleostephus myconis (L.)Reich.	Asteraceae	Europe	1937
Conium maculatum L.	Apiaceae	Europe	1848
Convolvulus arvensis L.	Convolvulaceae	Europe	1848

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Conyza bonariensis (L.) Cronq.	Asteraceae	South America	1848
Conyza floribunda Kunth.	Asteraceae	South America	1848
Coriaria ruscifolia L.	Coriariaceae	South America	1846
Coronopus didymus (L.) Smith.	Brassicaceae	America	1846
Cotula australis (Sieb.) Hook.	Asteraceae	New Zeland	1903
Cotula coronopifolia L.	Asteraceae	Africa	1857
Crepis capillaris (L.) Wallr.	Asteraceae	Europe	1881
Crepis pulchra L.	Asteraceae	Europe	1990
Crepis setosa Hall.	Asteraceae	Europe	1921
Crepis vesicaria L.	Asteraceae	Europe	1951
Crocosmia x crocosmiiflora	Iridaceae	Africa	1929
Crotalaria grahamiana Wight and Arn.	Fabaceae	India	1982
Crotalaria incana L.	Fabaceae	Tropical America-Africa	1955
Crotalaria pallida Aiton.	Fabaceae	Africa	1913
Cyclospermum leptophyllum (Pers.) Sprag.	Apiaceae	South America	1848
Cymbalaria muralis P.G. Gaertn., B. Mey. and Scherb.	Scrophulariaceae	Europe	1881
Cymbopogon citratus Stapf.	Poaceae	India	1963
Cynara cardunculus L.	Asteraceae	Europe	1848
Cynodon dactylon (L.) Pers.	Poaceae	Africa	1854
Cynoglossum creticum Miller.	Boraginaceae	Europe	1907
Cynoglossum limense Willd.	Boraginaceae	South America	1929
Cynoglossum zeylanicum Brand.	Boraginaceae	India	1941
Cynosurus cristatus L.	Poaceae	Eurasia	1924
Cynosurus echinatus L.	Poaceae	Europe	1881
Cyperus alternifolius L.	Cyperaceae	Madagascar	1956
Cyperus articulatus L.	Cyperaceae	Cosmopolite	1854
Cyperus difformis L.	Cyperaceae	Europe	1983
Cyperus eragrostis Lam.	Cyperaceae	Central America	1854
Cyperus laetus Kunth.	Cyperaceae	South America	1854
Cyperus laevigatus L	Cyperaceae	Europe	1926
Cyperus rotundus L.	Cyperaceae	Asia	1929
Cyperus squarrosus L.	Cyperaceae	Madagascar	1925
Cytisus scoparius (L.) Link.	Fabaceae	Europe	1847
Cytisus striatus (Hill) Rothm.	Fabaceae	Europe	1897
Dactylis glomerata L.	Poaceae	Europe	1910
Datura ferox L.	Solanaceae	East of Asia	1981
Datura inoxia Miller.	Solanaceae	North America	1988
Datura stramonium L.	Solanaceae	North America	1849
Daucus carota L.	Apiaceae	Europe	1848
Daucus pusillus Michx.	Apiaceae	America?	1916
Deschampsia berteroana (Kunth) Trin.	Poaceae	South America	1854
Deschampsia setacea (Huds.) Hack.	Poaceae	Europe	1930
Descurainia sophia (L.) Webb.	Brassicaceae	Europe	1846
Descurainia stricta (Phil.) Prantl ex Reiche	Brassicaceae	America	1860
Dianthus armeria L.	Caryophyllaceae	Europe	1968
Dichondra sericea Swartz	Convolvulaceae	America	1849
Digitalis purpurea L.	Scrophulariaceae	Europe	1875

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Digitaria aequiglumis (Hackel and Arech.) Parodi	Poaceae	South America	1896
Digitaria ciliaris (Retz.) Koeler.	Poaceae	Asia (Pantropical?)	1913
Digitaria ischaemum (Schreber) Muhl.	Poaceae	Europe	1974
Digitaria sanguinalis (L.) Scop.	Poaceae	Central America	1873
Digitaria setigera Roth ex Roem. et Schult.	Poaceae	Tropical Asia	1921
Digitaria violascens Link.	Poaceae	Central America	1991
Diplachne uninervia (C.Presl) Parodi	Poaceae	America	1854
Diplotaxis muralis (L.) DC.	Brassicaceae	Europe	1937
Dipsacus sativus (L.) Honck.	Dipsacaceae	Europe	1848
Distichlis spicata (L.) Greene.	Poaceae	America	1854
Polichos lignosus L.	Fabaceae	Africa	1955
Draba verna L.	Brassicaceae	Europe	1901
Duchesnea indica (Andr.) Focke	Rosaceae	Asia	1919
Echinochloa colona (L.) Link	Poaceae	Central America	1896
Echinochloa crus-galli (L.) Beauv.	Poaceae	Central America	1854
Echinochloa crus-pavonis (H.B.K.) Schult	Poaceae	Central America	1854
Echium plantagineum L.	Boraginaceae	Europe	1935
Echium vulgare L.	Boraginaceae	Europe	1907
Eclipta prostrata (L.) L.	Asteraceae	Cosmopolite	1848
Egeria densa Planch.	Hydrocharitaceae	South America	1956
Eichornia crassipes (Mart.) Solms.	Pontederiaceae	Central America	1917
Eleocharis acicularis (L.) Roemer and Schultes.	Cyperaceae	Cosmopolite	1985
Eleocharis nodulosa (Roth) Schult.	Cyperaceae	South America	1901
Eleocharis palustris (L.) Roemer and Schultes	Cyperaceae	South America	1854
Eleusine indica (L.) Gaertn.	Poaceae	Central America	1921
Eleusine tristachya (Lam.) Lam.	Poaceae	South America	1923
Elodea potamogeton (Bert.) Esp.	Hydrocharitaceae	South America	1852
Elytrigia repens L.	Poaceae	Eurasia	1854
Emex spinosa (L.) Campd.	Plantaginaceae	Mediterranean basin	1998
Epilobium obscurum Schreb.	Onagraceae	Europe	1954
Spilobium tetragonum L.	Onagraceae	Europe	1942
Equisetum bogotense Kunth.	Equisetaceae	America	1854
Eragrostis curvula (Schrader) Nees.	Poaceae	Africa	1961
Gragrostis pilosa (L.) P. Beauv.	Poaceae	Africa	1923
Gragrostis virescens Presl.	Poaceae	South America	1854
Gremocarpus setigerus (Hook.) Benth.	Euphorbiaceae	North America	1980
Erigeron karwinskianus DC.	Asteraceae	Central America	1934
Eriochloa montevidensis Griseb.	Poaceae	South America	1950
Erodium botrys (Cav.) Bertol.	Geraniaceae	Europe	1846
Grodium cicutarium (L.) L'Hér	Geraniaceae	Europe	1846
Grodium geoides A.StHil.	Geraniaceae	Africa	1930
Grodium malacoides (L.) L´Her.	Geraniaceae	Europe	1846
Erodium moschatum (L.) L´Hér.	Geraniaceae	Europe	1846
Eruca vesicaria (L.) Cav.	Brassicaceae	Europe	1971
	Diassicaceae		
Fryngium rostratum Cav.	Apiaceae	South America	1848
Eryngium rostratum Cav. Eschscholtzia californica Cham.		South America North America	1848 1881

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Euphorbia falcata L.	Euphorbiaceae	Europe	1944
Euphorbia helioscopia L.	Euphorbiaceae	Europe	1938
Euphorbia hirta L.	Euphorbiaceae	Central America	1946
Euphorbia hypericifolia L.	Euphorbiaceae	America	1990
Euphorbia lathyris L.	Euphorbiaceae	Europe	1818
Euphorbia maculata L.	Euphorbiaceae	Central America	1987
Euphorbia ovalifolia (Klotz and Garcke) Boissier.	Euphorbiaceae	South America	1944
Euphorbia peplus L.	Euphorbiaceae	Europe	1916
Euphorbia platyphyllos L.	Euphorbiaceae	Europe	1934
Euphorbia serpens Kunth.	Euphorbiaceae	America	1944
Fallopia convolvulus (L.) A. Löve.	Polygonaceae	Europe	1932
Festuca arundinacea Schreber.	Poaceae	Europe	1904
Festuca juncifolia StAmans.	Poaceae	Europe	1970
Festuca rubra L.	Poaceae	Cosmopolite	1967
Filago gallica L.	Asteraceae	Europe	1848
Flaveria bidentis (L.) Kuntze	Asteraceae	South America	1848
Foeniculum vulgare Miller.	Apiaceae	Europe	1848
Fumaria agraria Lag.	Fumariaceae	Europe	1845
Fumaria capreolata L.	Fumariaceae	Europe	1839
Fumaria parviflora Lam.	Fumariaceae	Europe	1869
Galega officinalis L.	Fabaceae	Europe	1881
Galenia pubescens (Eckl. and Zeyh.) Druce.	Aizoaceae	Africa	2001
Galeopsis tetrahit L.	Lamiaceae	Europe	1990
Galinsoga parviflora Cav.	Asteraceae	South America	1848
Galium aparine L.	Rubiaceae	Europe	1848
Galium murale (L.) All.	Rubiaceae	Europe	1914
Galium tricornutum Dandy.	Rubiaceae	Europe	1959
Gamochaeta spicata (Lam.) Cabrera	Asteraceae	South America	1848
Gamochaeta stachydifolia (Lam.) Cabrera	Asteraceae	South America	1896
Gastridium phleoides (Nees and B.Mey.) C.E.Hubb.	Poaceae	Europe	1854
Geranium dissectum L.	Geraniaceae	Europe	1846
Geranium molle L.	Geraniaceae	Europe	1896
Geranium purpureum Vill.	Geraniaceae	Europe	1925
Geranium pusillum Burm.	Geraniaceae	Eurasia	1996
Geranium robertianum L.	Geraniaceae	Europe	1846
Glechoma hederacea L.	Lamiaceae	Europe	1931
Glyceria fluitans (L.) R. Br	Poaceae	Eurasia	1943
Gossypium barbadense L.	Malvaceae	America	1931
Hainardia cylindrica (Willd.) Greuter.	Poaceae	Europe	1955
Hedypnois cretica (L.) DumCourset.	Asteraceae	Europe	1903
Helianthus tuberosus L.	Asteraceae	North America	1848
Heliotropium curassavicum L.	Boraginaceae	America	1849
Herniaria cinerea DC.	Caryophyllaceae	Europe	1944
Hesperis matronalis L.	Brassicaceae	Europe	1881
Hibiscus trionum L.	Malvaceae	Europe	1846
Hieracium aurantiacum L.	Asteraceae	Europe	1967
www. with war with the	1 Ibici accac	Laropo	1707

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Hieracium praealtum Vill. ex Gochnat	Asteraceae	Europe	1988
Hirschfeldia incana (L.)Lagreze-Fossat.	Brassicaceae	Europe	1963
Holcus lanatus L.	Poaceae	Europe	1875
Hordeum hystrix Roth.	Poaceae	Europe	1950
Hordeum jubatum L.	Poaceae	North America	1955
Hordeum marinum Huds.	Poaceae	Europe	1985
Hordeum murinum L.	Poaceae	Europe	1854
Hordeum secalinum L.	Poaceae	Europe	1854
Hydrocleys nymphoides (Humb. and Bonpl. ex Willd.) Buchenau.	Butomaceae	South America	1951
Hydrocotyle bonariensis Lam	Apiaceae	Central America	1848
Hypericum androsaemum L.	Hypericaceae	Europe	1881
Hypericum perforatum L	Hypericaceae	Europe	1896
Hypericum x inodorum	Hypericaceae	Europe	1919
Hypochaeris aff glabra L.	Asteraceae	Europe	1905
Hypochaeris radicata L.	Asteraceae	Europe	1905
mperata condensata Steud.	Poaceae	South America	1854
ndigofera truxillensis Kunth.	Fabaceae	South America	1930
pomoea purpurea (L.) Roth.	Convolvulaceae	America	1849
ris pseudacorus L.	Iridaceae	Eurasia	1995
satis tinctoria L.	Brassicaceae	Europe	1846
uncus bufonius L.	Juncaceae	Cosmopolite	1854
uncus effusus L.	Juncaceae	Cosmopolite	1915
uncus imbricatus Laharpe.	Juncaceae	South America	1854
uncus procerus E. Mey	Juncaceae	South America	1854
Kickxia elatine (L.) Dumort	Scrophulariaceae	Europe	1971
Knautia integrifolia (L.) Bertol.	Dipsacaceae	Europe	1987
Lactuca saligna L.	Asteraceae	Europe	1960
Lactuca sativa L.	Asteraceae	Europe	1955
actuca serriola L.	Asteraceae	Europe	1905
Lactuca virosa L.	Asteraceae	Europe	1933
Lagurus ovatus L.	Poaceae	Europe	1881
Lamarckia aurea (L.) Moench	Poaceae	Europe	1881
Lamium amplexicaule L.	Lamiaceae	Europe	1908
apsana communis L.	Asteraceae	Eurasia	1905
Lathyrus magellanicus Lam.	Fabaceae	South America	1847
Lathyrus sativus L.	Fabaceae	Eurasia	1946
Leontodon autumnalis L.	Asteraceae	Europe	1951
Leontodon hirtus L.	Asteraceae	Europe	1976
Leontodon saxatilis Lam.	Asteraceae	Europe	1935
Lepidium bonariense L.	Brassicaceae	South America	1846
epidium pseudo-didymus Thell.	Brassicaceae	South America	1845
Leucanthemum vulgare Lam.	Asteraceae	Europe	1875
evisticum officinale (L) Koch.	Apiaceae	Europe	1881
eymus arenarius (L.) Hochst.	Poaceae	Europe	1952
imnobium laevigatum (Humb. and Bonpl. ex Willd.) Heine	Hydrocharitaceae	South America	1954
inaria texana Scheele.	Scrophulariaceae	Europe	1875
Linaria vulgaris L.	Scrophulariaceae	Europe	1875

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Lindernia anagallidea (Michx.) Pennell	Scrophulariaceae	America	1911
Linum bienne Miller.	Linaceae	Europe	1917
Linum catharticum L.	Linaceae	Eurasia	1952
Linum usitatissimum L.	Linaceae	Europe	1846
Lobularia maritima (L.) Desv.	Brassicaceae	Europe	1846
Lolium multiflorum Lam.	Poaceae	Europe	1854
Lolium perenne L.	Poaceae	Europe	1854
Lolium rigidum Gaudin	Poaceae	Europe	1924
Lolium temulentum L.	Poaceae	Europe	1854
Lophochloa cristata (L.) Hylander	Poaceae	Europe	1916
Lotus angustissimus L.	Fabaceae	Eurasia	1978
Lotus corniculatus L.	Fabaceae	Europe	1847
Lotus pedunculatus Cav.	Fabaceae	Eurasia	1921
Lotus tenuis Waldst et. Kit	Fabaceae	Europe	1947
Lotus uliginosus Schkuhr	Fabaceae	Europe	1847
Ludwigia peploides (Kunth) P.H. Raven.	Onagraceae	South America	1847
Lupinus albus L.	Fabaceae	Europe	1975
Lupinus angustifolius L.	Fabaceae	Europe	1950
Lupinus arboreus Sims	Fabaceae	North America	1881
Lupinus luteus L.	Fabaceae	Eurasia	2008
Lupinus microcarpus Sims.	Fabaceae	South America	1847
ychnis coronaria L.	Caryophyllaceae	Europe	1918
Lycopersicon chilense Dunal	Solanaceae	South America	1852
Lycopus europaeus L.	Lamiaceae	Europe	1965
Lythrum hyssopifolia L.	Lythraceae	Europe	1847
ythrum maritimum Kunth.	Lythraceae	South America	1974
Lythrum salicaria L.	Lythraceae	Eurasia	1930
Macroptilium lathyroides (L.) Urb.	Fabaceae	Central America	1847
Malva assurgentiflora (Kellogg) M. F. Ray	Malvaceae	North America	1948
Malva dendromorpha M.F.Ray	Malvaceae	Europa-Africa	1935
Malva moschata L.	Malvaceae	Europe	1932
Malva neglecta Wallr.	Malvaceae	Europe	1846
Malva nicaeensis All.	Malvaceae	Europe	1846
Malva parviflora L.	Malvaceae	Europe	1846
Malva sylvestris L.	Malvaceae		1954
		Europe Central America	
Malvastrum coromandelianum (L.) Garcke.	Malvaceae		1913
Marrubium vulgare L.	Lamiaceae	Europe	1849
Mecardonia procumbens (Mill.) Small	Scrophulariaceae	America	1991
Medicago arabica (L.) Huds.	Fabaceae	Europe	1847
Medicago arborea L.	Fabaceae	Europe	1954
Medicago lupulina L.	Fabaceae	Europe	1847
Medicago minima (L.) L.	Fabaceae	Europe	1847
Medicago polymorpha L.	Fabaceae	Europe	1847
Medicago sativa L.	Fabaceae	Eurasia	1847
Melilotus albus Desr.	Fabaceae	Eurasia	1928
Melilotus indicus (L.) All.	Fabaceae	Europe	1847
Melilotus officinalis L.	Fabaceae	Eurasia	2005

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Melinis repens (Willd.) Zizka	Poaceae	Africa	1990
Melissa officinalis L.	Lamiaceae	Europe	1849
Mentha aquatica L.	Lamiaceae	Europe	1849
Mentha pulegium L.	Lamiaceae	Europe	1849
Mentha suaveolens L.	Lamiaceae	Europe	1916
Mentha x piperita	Lamiaceae	Europe	1849
Mercurialis annua L.	Euphorbiaceae	Eurasia	1931
Mesembryanthemum crystallinum L.	Aizoaceae	Africa	1881
Microchloa indica (L. f.) P. Beauv	Poaceae	Australia	1927
Miscanthus sinensis Anderss.	Poaceae	Asia	1925
Misopates orontium (L.) Rafin.	Scrophulariaceae	Europe	1987
Modiola caroliniana (L.) G. Don.	Malvaceae	Europe	1846
Muhlenbergia asperifolia (Nees and Meyen ex Trin.) Parodi.	Poaceae	America	1854
Myosotis arvensis (L.) Hill.	Boraginaceae	Europe	1934
Myosotis discolor Pers.	Boraginaceae	Europe	1936
Myosotis latifolia Poir.	Boraginaceae	Africa	1933
Myosotis laxa Lehm.	Boraginaceae	North America, Eurasia	1929
Myosotis scorpioides Link.	Boraginaceae	Eurasia	1938
<i>Myosotis stricta</i> Link ex Roem. and Schult.	Boraginaceae	Eurasia	1962
Myriophyllum aquaticum (Velloso) Verdc.	Haloragaceae	South America	1847
Nasturtium officinale R. Br.	Brassicaceae	Europe	1980
Nicandra physalodes (L.) Gaertn.	Solanaceae	South America	1849
Nicotiana acuminata (Graham) Hook.	Solanaceae	South America	1849
Nicotiana glauca Graham.	Solanaceae	South America	1909
Nicotiana sylvestris Speg. and Comes	Solanaceae	South America	1996
Nothoscordum gracile (Dryand. Ex Aiton) Stearn	Liliaceae	South America	1896
Nymphaea alba L.	Fabaceae	Europe	1992
Oenothera rosea L´Hér. ex Ait.	Onagraceae	America	1928
Oenothera stricta Ledeb. ex Link	Onagraceae	South America	1847
Omphalodes linifolia (L.) Moench.	Boraginaceae	Europe	1943
Onopordum acanthium L.	Asteraceae	Europe	1881
Ornithopus compressus L.	Fabaceae	Europe	1950
Ornithopus pinnatus (Miller) Druce.	Fabaceae	Europe	1953
Ornithopus sativus Brot.	Fabaceae	Europe	1930
Orobanche minor Smith	Orobancheaceae	Europe	1952
Orobanche ramosa L.	Orobancheaceae	Europe	1986
Oryza sativa L.	Poaceae	Asia	1933
Ovidia pillopillo (Gay) Meissner.	Thymelaeaceae	South America	1851
Oxalis articulata Savign.	Oxalidaceae	South America	1973
Oxalis corniculata L.	Oxalidaceae	Europe	1846
Oxalis pes-caprae L.	Oxalidaceae	Africa	1916
Panicum capillare L.	Poaceae	North America	1926
Panicum dicotomiflorum Michx.	Poaceae	Central America	1983
Panicum miliaceum L.	Poaceae	Asia	1881
Papaver dubium L.	Papaveraceae	Europe	1998
	D	P	1000
Papaver hybridum L	Papaveraceae	Europe	1999

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Papaver somniferum L.	Papaveraceae	Europe	1845
Parapholis incurva (L.) Hubb.	Poaceae	Europe	1940
Parapholis strigosa (Dumort.) C.E.Hubb.	Poaceae	Europe	1942
Parentucellia latifolia (L.)Caruel.	Scrophulariaceae	Europe	1982
Parentucellia viscosa (L.) Caruel	Scrophulariaceae	Europe	1959
Parietaria judaica L.	Urticaceae	Europe	1962
Pascalia glauca Ortega	Asteraceae	South America	1895
Paspalum dasypleurum Kunze ex E. Desv.	Poaceae	South America	1854
Paspalum dilatatum Poir.	Poaceae	South America	1935
Paspalum paspalodes (Michx) Scribner	Poaceae	Central America	1854
Paspalum urvillei Steud.	Poaceae	South America	1936
Paspalum vaginatum Swartz.	Poaceae	America	1854
Passiflora foetida L.	Passifloraceae	Asia	1930
Pastinaca sativa L.	Apiaceae	Europe	1881
Pennisetum chilense (Desvaux) Jackson ex Fries	Poaceae	South America	1854
Pennisetum clandestinum Hochst. ex Chiov.	Poaceae	Africa	1986
Pennisetum villosum R. Br. ex Fresen.	Poaceae	Africa	1928
Petrorhagia dubia (Raf.) G. López and Romo	Caryophyllaceae	Europe	1934
Petrorhagia prolifera (L.) P.W. Ball and Heywood.	Caryophyllaceae	Europe	1942
Petunia parviflora Juss.	Solanaceae	America	1998
Phalaris aquatica L.	Poaceae	Europe	1926
Phalaris arundinacea L.	Poaceae	Eurasia	1932
Phalaris canariensis L.	Poaceae	Europe	1925
Phalaris caroliniana Walt.	Poaceae	North America	1932
Phalaris minor Retz.	Poaceae	Eurasia	1925
Phleum pratense L.	Poaceae	Eurasia	1920
Phragmites australis (Cav.) Trin.	Poaceae	Cosmopolite	1854
Phyla canescens (Kunth) Greene	Verbenaceae	Tropical America-Africa	1849
Phyla reptans (Kunth) Greene.	Verbenaceae	Central America	1849
Physalis peruviana L.	Solanaceae	South America	1849
Physalis pubescens L.	Solanaceae	America	1849
Physalis viscosa L.	Solanaceae	South America	1927
Picris echioides L.	Asteraceae	Europe	1928
Piptatherum miliaceum (L.) Coss.	Poaceae	Europe	1959
Pitraea cuneato-ovata (Cav.) Caro	Verbenaceae	South America	1849
Plantago coronopus L.	Plantaginaceae	Europe	1940
Plantago lanceolata L.	Plantaginaceae	Europe	1910
Plantago major L.	Plantaginaceae	Europe	1932
Pluchea absinthoides (Hook. et Arn.) H. Robinson and Cuatr.	Asteraceae	South America	1848
Poa annua L.	Poaceae	Europe	1854
Poa bulbosa L.	Poaceae	Eurasia-Africa	1996
Роа compressa L.	Poaceae	Eurasia-Africa	1955
Poa glauca Vahl	Poaceae	Eurasia	1949
Poa infirma Kunth	Poaceae	Europe	1939
Poa nemoralis L.	Poaceae	-	1952
		Europe	
Poa pratensis L.	Poaceae	Europe	1854
Poa stenantha Trin.	Poaceae	America	1938

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Poa trivialis L.	Poaceae	Eurasia-Africa	1924
Polycarpon tetraphyllum (L.) L.	Caryophyllaceae	Europe	1847
Polygonum acuminatum Kunth.	Polygonaceae	North America	1913
Polygonum aviculare L.	Polygonaceae	Asia	1851
Polygonum campanulatum Hook.	Polygonaceae	Asia	1990
Polygonum hydropiper (L.) Spach.	Polygonaceae	Europe	1960
Polygonum hydropiperoides Michx.	Polygonaceae	America	1851
Polygonum lapathifolium L.	Polygonaceae	Europe	1851
Polygonum maritimum L.	Polygonaceae	Eurasia	1930
Polygonum orientale L.	Polygonaceae	Asia	1935
Polygonum persicaria L.	Polygonaceae	Europe	1851
Polypogon maritimus Willd.	Poaceae	Eurasia-Africa	1967
Polypogon monspeliensis (L.) Desf.	Poaceae	Europe	1854
Polypogon viridis (Gouan) Breistr.	Poaceae	Europe	1927
Porophyllum ruderale (Jacq.) Cass.	Asteraceae	South America	2001
Portulaca oleracea L.	Portulacaceae	Europe	1847
Potamogeton pusillus L.	Potamogetonaceae	Cosmopolite	1852
Potentilla anserina L.	Rosaceae	Europe	1913
Potentilla reptans L.	Rosaceae	Eurasia	1922
Prunella vulgaris L.	Lamiaceae	Europe	1881
Pseudognaphalium cheiranthifolium (Lam.) Hillart and Burtt.	Asteraceae	South America	1896
Pseudognaphalium luteoalbum (L.) Hilliard and Burtt	Asteraceae	Europe	1848
Ranunculus apiifolius Pers.	Ranunculaceae	South America	1845
Ranunculus arvensis L.	Ranunculaceae	Europe	1989
Ranunculus muricatus L.	Ranunculaceae	Europe	1845
Ranunculus parviflorus L.	Ranunculaceae	Europe	1945
Ranunculus repens L.	Ranunculaceae	Europe	1875
Ranunculus sceleratus L	Ranunculaceae	Europe	1969
Raphanus raphanistrum L.	Brassicaceae	Europe	1937
Raphanus sativus L.	Brassicaceae	Europe	1846
Rapistrum rugosum (L.) All.	Brassicaceae	Europe	1928
Reseda decursiva Forssk.	Resedaceae	Eurasia	1916
Reseda lutea L.	Resedaceae	Europe	1940
Reseda odorata L.	Resedaceae	Europe	1991
Reseda phyteuma L.	Resedaceae	Europe	1961
Rhynchosia minima (L.) D.C.	Fabaceae	Australia	1955
Ricinus communis L.	Euphorbiaceae	Central America	1851
Robinia pseudoacacia L.	Fabaceae	North America	1897
Rorippa nasturtium-aquaticum (L.) Schinz and Thell.	Brassicaceae	Europe	1846
Rorippa sylvestris (L.) Bess.	Brassicaceae	Europe	1933
Rosa canina L.	Rosaceae	Eurasia	1999
Rosa rubiginosa L.	Rosaceae	Europe	1875
Rostraria cristata (L.) Tzvelev.	Poaceae	Europe	1916
Rubia tinctorum L.	Rubiaceae	Europe	1900
Rubus constrictus Muell. et Lef.	Rosaceae	Europe	1928
Rubus ulmifolius Schott	Rosaceae	Europe	1897
Rumex acetosa L.	Polygonaceae	Europe	1993

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Rumex acetosella L.	Polygonaceae	Europe	1851
Rumex conglomeratus Murray.	Polygonaceae	Europe	1917
Rumex crispus L.	Polygonaceae	Europe	1851
Rumex cristatus DC.	Polygonaceae	Mediterranean basin	1999
Rumex longifolius DC.	Polygonaceae	Europe	1932
Rumex obtusifolius L.	Polygonaceae	Europe	1924
Rumex pulcher L.	Polygonaceae	Europe	1875
Rumex sanguineus L.	Polygonaceae	Africa	1987
Ruta chalepensis L.	Rutaceae	Europe	1911
Sagina apetala Ard.	Caryophyllaceae	Europe	1846
Sagina procumbens L.	Caryophyllaceae	Europe	1924
Salix babylonica L.	Salicaceae	Asia	1970
Salix viminalis L.	Salicaceae	Eurasia	1929
Salsola kali L.	Chenopodiaceae	Asia Minor	1849
Salvinia auriculata Aubl.	Salviniaceae	Tropical America	1961
Sambucus nigra L.	Caprifoliaceae	Eurasia	1929
Samolus valerandi L.	Primulaceae	Subcosmopolite	1899
Sanguisorba minor Scop.	Rosaceae	Europe	1875
Sapindus saponaria L.	Sapindaceae	North America	1998
Saponaria officinalis L.	Caryophyllaceae	Europe	1881
Saxifraga umbrosa L.	Saxifragaceae	Europe	1932
Scabiosa atropurpurea L.	Dipsacaceae	Europe	1848
Scandix pecten-veneris L.	Apiaceae	Europe	1899
Schismus arabicus Nees	Poaceae	Africa	1927
Schismus barbatus (L.) Thell.	Poaceae	Europe	1926
Schizachyrium sanguineum (Retz.) Alston	Poaceae	America, Cosmopolita	1941
Schkuhria pinnata (Lam.) Kuntze ex Thell.	Asteraceae	South America	1895
Scirpus californicus (C.A.Mey.) Steud.	Cyperaceae	South America	1854
Scirpus mucronatus L.	Cyperaceae	Eurasia	1938
Scleranthus annuus L.	Caryophyllaceae	Europe	1937
Scolymus hispanicus L.	Asteraceae	Europe	1881
Scrophularia auriculata L.	Scrophulariaceae	Europe	1928
Sedum acre L.	Crassulaceae	Eurasia	1936
Selaginella apoda (L.) Fernald	Selaginellaceae	Cosmopolite	1975
Senecio angulatus L. fil.	Asteraceae	Africa	1919
Senecio aquaticus Hill.	Asteraceae	Europe	1895
Senecio mikanioides Otto ex Walp.	Asteraceae	Africa	1949
Senecio sylvaticus L.	Asteraceae	Europe	1917
Senecio vulgaris L.	Asteraceae	Europe	1854
Senna bicapsularis (L.) Roxb.	Fabaceae	America	1944
Sesuvium portulacastrum (L.) L.	Caryophyllaceae	America	1979
Setaria adhaerens (Forssk.) Chiov.	Poaceae	Europa-Africa	1987
Setaria glauca (L.) Beauv.	Poaceae	Europe	1982
Setaria parviflora (Poir.) Kerguélen.	Poaceae	America	1854
Setaria pumila (Poiret) Roemer and Schultes	Poaceae	Europe	1980
Setaria verticillata (L.) Beauv.	Poaceae	Europe	1896
Setaria viridis (L.)Beauv.	Poaceae	Europe	1955
Journa virtuis (BijDeauvi	1 Jaccat	Larope	1700

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Sherardia arvensis L.	Poaceae	Europe	1914
Sida rhombifolia L.	Malvaceae	Cosmopolite	1942
Sida spinosa L.	Malvaceae	Central America	1937
Sigesbeckia jorullensis Kunth.	Asteraceae	Central America	1903
Silene armeria L.	Caryophyllaceae	Europe	1881
Silene gallica L.	Caryophyllaceae	Europe	1846
Silene vulgaris (Moench.) Garcke	Caryophyllaceae	Eurasia	1933
Silybum marianum L.	Asteraceae	Europe	1848
Sisymbrium altissimum L.	Brassicaceae	Eurasia	1953
Sisymbrium austriacum Jacq.	Brassicaceae	Europe	1942
Sisymbrium irio L.	Brassicaceae	Europe	1929
Sisymbrium officinale (L.) Scop.	Brassicaceae	Europe	1846
Sisymbrium orientale L.	Brassicaceae	Europe	1929
Sium latifolium L.	Apiaceae	Europe	1941
Solanum eleagnifolium Cav.	Solanaceae	America	1849
Solanum marginatum L. f.	Solanaceae	Africa	1881
Solanum nigrum L.	Solanaceae	Europe	1849
Solanum pseudocapsicum L.	Solanaceae	America	1961
Solanum radicans L.f.	Solanaceae	South America	1920
Colanum sisymbriifolium Lam.	Solanaceae	South America	1923
Goleirolia soleirolii (Req.) Dandy.	Urticaceae	Eurasia	1926
Solidago chilensis Meyen	Asteraceae	South America	1848
Soliva pterosperma (Juss.) Less.	Asteraceae	South America	1903
Soliva sessilis Ruiz et Pavón	Asteraceae	South America	1848
Soliva valdiviana Phil.	Asteraceae	South America	1864
Sonchus arvensis L.	Asteraceae	Europe	1848
Sonchus asper (L.) Hill.	Asteraceae	Europe	1848
Sonchus oleraceus L.	Asteraceae	Europe	1848
Sonchus tenerrimus L.	Asteraceae	Europe	1864
Sorghum halepense (L.) Pers.	Poaceae	Africa	1924
Spartium junceum L.	Fabaceae	Europe	1847
Spergula arvensis L.	Caryophyllaceae	Europe	1895
Spergularia bocconei (Scheele) Graebner	Caryophyllaceae	Europe	1930
Spergularia marina (L.) Besser.	Caryophyllaceae	Europe	1925
Spergularia media (L.) K. Presl	Caryophyllaceae	Eurasia	1912
Spergularia rubra Pers.	Caryophyllaceae	Europe	1846
Spilanthes leiocarpa DC.	Asteraceae	South America	1981
Sporobolus indicus (L.) R. Br.	Poaceae	Central America	1854
Sporobolus virginicus (L.) Kunth	Poaceae	Central America	1955
Stachys arvensis L.	Lamiaceae	Europe	1963
Stachys grandidentata Lindl.	Lamiaceae	South America	1849
Stellaria media (L.) Vill.	Caryophyllaceae	Europe	1846
Stellaria pallida (Dumort.) Piré.	Caryophyllaceae	Europe	1960
Stemodia durantifolia (L.) Sw.	Scrophulariaceae	America	1849
Stenotaphrum secundatum (Walter) Kuntze.	Poaceae	South America	1923
Stipa leptostachya Griseb.	Poaceae	South America	1950
Stipa neesiana Trinius et Ruprecht.	Poaceae	South America	1854

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Taeniatherum caput-medusae (L.) Nevski.	Poaceae	Europe	1986
Tanacetum parthenium (L.) Schultz-Bip.	Asteraceae	Europe	1848
Tanacetum vulgare L.	Asteraceae	Europe	1919
Tarasa tenella (Cav.) Krapov.	Malvaceae	South America	1846
Taraxacum officinale Weber.	Asteraceae	Europe	1875
Teesdalia nudicaulis (L.) R.Br.	Brassicaceae	Europe	1988
Teline monspessulana (L.) K. Koch.	Fabaceae	Europe	1847
Tetragonia tetragonoides (Pall.) Kuntze	Aizoaceae	Africa	1847
Thlaspi arvense L.	Brassicaceae	Europe	1985
Tolpis barbata (L.) Gaertner.	Asteraceae	Europe	1881
Torilis arvensis (Huds.) Link	Apiaceae	Europe	1990
Torilis nodosa (L.) Gaertner.	Apiaceae	Europe	1848
Tradescantia fluminensis Vell.	Commelinaceae	South America	1938
Tragopogon porrifolius L.	Asteraceae	Europe	1881
Tribulus terrestris L.	Zygophillaceae	Europe	1891
Trifolium angustifolium L.	Fabaceae	Europe	1974
Trifolium arvense L.	Fabaceae	Europe	1926
Trifolium aureum Pollich	Fabaceae	Europe	1936
Trifolium campestre Schreber.	Fabaceae	Europe	1897
Trifolium dubium Sibth.	Fabaceae	Europe	1897
Trifolium fragiferum L.	Fabaceae	Eurasia	1957
Trifolium glomeratum L.	Fabaceae	Europe	1922
Trifolium hybridum L.	Fabaceae	Europe	1971
Trifolium incarnatum L.	Fabaceae	Europe	1932
Trifolium pratense L.	Fabaceae	Europe	1920
Trifolium repens L.	Fabaceae	Europe	1897
Trifolium striatum L.	Fabaceae	Europe	1897
Trifolium subterraneum L.	Fabaceae	Eurasia	1974
Trifolium suffocatum L.	Fabaceae	Eurasia	1950
Trifolium tomentosum L.	Fabaceae	Europe	1948
Trigonella monspeliaca L.	Fabaceae	Eurasia	1951
Tripleurospermum maritimum (L.) Koch.	Asteraceae	Australia	1971
Tripleurospermum perforatum (Mérat) Laínz.	Asteraceae	Europe	1903
Tropaeolum majus L.	Tropaeolaceae	South America	1951
Typha domingensis Pers.	Thyphaceae	South America	1985
Jlex europaeus L.	Fabaceae	Europe	1847
Trospermum picroides (L.) Scop. ex F.W.	Asteraceae	Europe	1881
Urtica dioica L.	Urticaceae	South America	1850
Irtica urens L.	Urticaceae	Europe	1851
Valerianella eriocarpa Desv.	Valerianaceae	Eurasia	1943
Valerianella locusta L.	Valerianaceae	Europe	1915
Valerianella rimosa Bast.	Valerianaceae	Eurasia	1995
Verbascum thapsus L.	Scrophulariaceae	Eurasia	1881
Verbascum virgatum Stokes.	Scrophulariaceae	Europe	1895
Verbena bonariensis L.	Verbenaceae	South America	1908
Verbena litoralis Kunth	Verbenaceae	America	1849
Verbena officinalis L.	Verbenaceae	Europe	1929
or botta officialis is	verbenaceae	Larope	1/4/

TABLE 1. CONTINUED.

SPECIES	FAMILY	ORIGIN	FIRST RECORD IN CHILE
Verbena rigida Spreng.	Verbenaceae	South America	1987
Verbesina aurita Phil.	Asteraceae	South America	1881
Verbesina encelioides (Cav.) Benth. and Hook.	Asteraceae	America	1945
Veronica anagallis-aquatica L.	Scrophulariaceae	Eurasia	1895
Veronica arvensis L.	Scrophulariaceae	Asia	1895
Veronica beccabunga L.	Scrophulariaceae	Mediterranean basin	1979
Veronica chamaedrys L.	Scrophulariaceae	Central Europe	1929
Veronica officinalis L.	Scrophulariaceae	Eurasia	1932
Veronica peregrina L.	Scrophulariaceae	America	1994
Veronica persica Poiret.	Scrophulariaceae	Europe	1909
Veronica scutellata L.	Scrophulariaceae	Europe	1932
Veronica serpyllifolia L.	Scrophulariaceae	Eurasia	1895
Vestia foetida (R. et P.) Hoff-	Solanaceae	South America	1849
Vicia benghalensis L.	Fabaceae	Europe	1897
Vicia hirsuta (L.) Gray.	Fabaceae	Europe	1897
Vicia sativa L.	Fabaceae	Europe	1847
Vicia tenuissima (M. Bieb.) Schinz and Thell.	Fabaceae	Central Europe	1987
Vicia tetrasperma (L.) Schreb.	Fabaceae	Europe	1897
Vicia villosa Roth	Fabaceae	Europe	1897
Vinca major L.	Apocinaceae	Europe	1881
Viola arvensis Murray.	Violaceae	Europe	1943
Viola odorata L.	Violaceae	Eurasia	1923
Viola tricolor L.	Violaceae	Europe	1846
Vulpia bromoides (L.) Gray	Poaceae	Europe	1854
Vulpia eriolepis (Desv.) Blom.	Poaceae	South America	1854
Vulpia muralis (Kunth) Nees	Poaceae	Europe	1854
Vulpia myuros (L.) C.C. Gmelin.	Poaceae	Europe	1854
Waltheria indica L.	Sterculiaceae	America	1925
Xanthium catharticum Kunth.	Asteraceae	South America	1902
Xanthium cavanillesii Schouw	Asteraceae	South America	1848
Xanthium spinosum L.	Asteraceae	South America	1848
Zannichellia palustris L.	Zanniechelliaceae	Cosmopolite	1852

TABLE 2. Origin and number of species of alien flora in Chile.

ORIGIN	SPECIES
Europe	385
South America	115
Eurasia	60
America	44
Central America	36
Africa	27
North America	20
Asia	18
Cosmopolite	13
Australia	8
India	3
Madagascar	2
circumpolar	2
New Zeland	1
cultive	1
undeterminated	1
without information	1

TABLE 3. List of families with number of genera, species and percent over total alien flora in Chile.

FAMILY	GENERA	SPECIES	%
Poaceae	69	157	21
Asteracea	68	118	16
Fabaceae	23	63	8
Brassicaceae	23	35	5
Scrophulariaceae	14	25	3
Caryophyllaceae	15	25	3
Chenopodiaceae	5	21	3
Solanaceae	9	20	3
Polygonaceae	3	19	3
Apiaceae	14	19	3
Malvaceae	9	16	2
Cyperaceae	4	15	2
Boraginaceae	7	15	2
Lamiaceae	9	14	2
Euphorbiaceae	4	14	2
Rosaceae	6	12	2
Ranunculaceae	4	11	1
Geraniaceae	2	10	1
Other families	82	128	19

TABLE 4. Types of life-cycle and number of species of alien flora in Chile.

LIFE-CYCLE	SPECIES
annual	333
perennial	325
variable life-cycle	55
biannual	19
without information	5

TABLE 5. Growing form and number of species of alien flora in Chile.

GROWING FORM	SPECIES
herb	672
shrub	41
tree	13
climber	10
subshrub	1

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